

In the Claims:

1. (Previously Presented) A polynucleotide sequence optimized for expression of an insecticidal protein in a plant wherein said polynucleotide sequence comprises a sequence selected from the group consisting of from about nucleotide position 7 through about nucleotide position 1803 as set forth in SEQ ID NO:3, from about nucleotide position 2650 through about nucleotide position 4446 as set forth in SEQ ID NO:5, from about nucleotide position 3047 through about nucleotide position 4844 as set forth in SEQ ID NO:8, from about nucleotide position 1247 through about nucleotide position 3043 as set forth in SEQ ID NO:11, and from about nucleotide position 1658 through about nucleotide position 3454 as set forth in SEQ ID NO:13.
2. (Previously Presented) The polynucleotide sequence according to claim 1 wherein said sequence is SEQ ID NO:3 from about nucleotide position 7 through about nucleotide position 1803.
3. (Cancelled)
4. (Previously Presented) The polynucleotide sequence according to claim 1 wherein said sequence is SEQ ID NO:8 from about nucleotide position 3047 through about nucleotide position 4844.
- 5.-6. (Cancelled)
7. (Previously Presented) A polynucleotide sequence encoding an insecticidal protein, said protein being selected from the group consisting of SEQ ID NO:2 from about amino acid position 2 through about amino acid position 600, SEQ ID NO:4 from about amino acid position 3 through about amino acid position 601, SEQ ID NO:7 from about amino acid position 3 through about amino acid position 601, SEQ ID NO:10 from about amino acid position 3 through about amino acid position 601, SEQ ID NO:12 from about amino acid position 3 through about amino acid position 601, and SEQ ID NO:14 from about amino acid position 3 through about amino acid position 601;
wherein said polynucleotide sequence encoding said protein is selected from the group consisting of SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:8, SEQ ID NO:11, and SEQ ID NO:13.
8. (Cancelled)

9. (Previously Presented) A expression cassette comprising the polynucleotide sequence substantially as set forth in SEQ ID NO:3 which functions in plants to produce an insecticidal protein, wherein said expression cassette is selected from the group consisting of SEQ ID NO:5, SEQ ID NO:8, SEQ ID NO:11, and SEQ ID NO:13.
10. (Previously Presented) A plant comprising a polynucleotide sequence optimized for expression of an insecticidal protein in a plant wherein said polynucleotide sequence comprises a sequence selected from the group consisting of from about nucleotide position 7 through about nucleotide position 1803 as set forth in SEQ ID NO:3, from about nucleotide position 2650 through about nucleotide position 4446 as set forth in SEQ ID NO:5, from about nucleotide position 3047 through about nucleotide position 4844 as set forth in SEQ ID NO:8, from about nucleotide position 1247 through about nucleotide position 3043 as set forth in SEQ ID NO:11, and from about nucleotide position 1658 through about nucleotide position 3454 as set forth in SEQ ID NO:13.
11. (Previously Presented) A seed or progeny produced from the plant of claim 10, wherein said seed or progeny comprises said sequence selected from the group consisting of from about nucleotide position 7 through about nucleotide position 1803 as set forth in SEQ ID NO:3, from about nucleotide position 2650 through about nucleotide position 4446 as set forth in SEQ ID NO:5, from about nucleotide position 3047 through about nucleotide position 4844 as set forth in SEQ ID NO:8, from about nucleotide position 1247 through about nucleotide position 3043 as set forth in SEQ ID NO:11, and from about nucleotide position 1658 through about nucleotide position 3454 as set forth in SEQ ID NO:13.
12. (Previously Presented) A plant cell comprising a polynucleotide sequence optimized for expression of an insecticidal protein in a plant wherein said polynucleotide sequence comprises a sequence selected from the group consisting of from about nucleotide position 7 through about nucleotide position 1803 as set forth in SEQ ID NO:3, from about nucleotide position 2650 through about nucleotide position 4446 as set forth in SEQ ID NO:5, from about nucleotide position 3047 through about nucleotide position 4844 as set forth in SEQ ID NO:8, from about nucleotide position 1247 through about nucleotide position 3043 as set forth in SEQ ID NO:11, and from about nucleotide position 1658 through about nucleotide position 3454 as set forth in SEQ ID NO:13.

13. (Previously Presented) A method for producing a transgenic plant cell expressing an insecticidal Cry1Bb endotoxins fragment, said method comprising transforming a plant cell with a polynucleotide sequence comprising a plant functional promoter operably linked to a nucleotide sequence encoding said fragment wherein said nucleotide sequence is selected from the group consisting of from about nucleotide position 7 through about nucleotide position 1803 as set forth in SEQ ID NO:3, from about nucleotide position 2650 through about nucleotide position 4446 as set forth in SEQ ID NO:5, from about nucleotide position 3047 through about nucleotide position 4844 as set forth in SEQ ID NO:8, from about nucleotide position 1247 through about nucleotide position 3043 as set forth in SEQ ID NO:11, and from about nucleotide position 1658 through about nucleotide position 3454 as set forth in SEQ ID NO:13.
14. (Currently Amended) A method for producing a transgenic plant resistant to lepidopteran insect infestation comprising:
- a) transforming a plant cell with a polynucleotide sequence comprising a plant functional promoter operably linked to [a] the nucleotide sequence as set forth at SEQ ID NO:3 encoding an insecticidal Cry1Bb delta endotoxin fragment; and
 - b) regenerating a transgenic plant from said plant cell, wherein said transgenic plant comprises said polynucleotide sequence and expresses insecticidally effective amounts of said fragment.
- 15.-22. (Cancelled)